

# Notic of Allowability

Applicati n N .

09/888,500

Examiner

Delma R. Flores Ruiz

Applicant(s)

ITOH, KATSUHISA

Art Unit

2828

## -- Th MAILING DATE of this communication appears n the cover sh t with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 03/02/2004.
2. ☒ The allowed claim(s) is/are 3-13.
3. ☒ The drawings filed on 26 June 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date 11/14/01
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

THO PHAN  
PRIMARY EXAMINER

## DETAILED ACTION

### *Allowable Subject Matter*

The following is an examiner's statement of reasons for allowance: claim 3 has been allowed over the prior art because they fail to teach a laser device, comprising: an optical fiber containing a laser activating substance inside for emitting a laser beam from a distal end portion thereof, at least part of said optical fiber being fixed in a dense state by an optical medium; and a laser light source for exciting said optical fiber by emitting an exciting light, wherein the optical medium is obtained by curing an oligomer substance so as to be changed to a polymer substance, said oligomer substance being substantially the same as said polymer substance, said polymer substance including a repeating unit represented by an empirical formula  $RSiO_{1.5}$  wherein said  $RSiO_{1.5}$  is selected from the group consisting of a polymethyl silsesquioxane, a polymethyl-hydride silsesquioxane, a polyphenyl silsesquioxane, a polyphenyl-methyl silsesquioxane, a phenyl silsesquioxane-dimethyl siloxane copolymer, a polyphenyl-vinyl silsesquioxane, polycyclohexyl silsesquioxane, a polycyclopentyl silsesquioxane, a polyhydride silsesquioxane, a poly(2-chloro ethyl) silsesquioxane, and poly(2-bromo ethyl) silsesquioxane, mixtures thereof and a mixture of at least one said  $RSiO_{1.5}$  and a polysiloxane.

The following is an examiner's statement of reasons for allowance: claim 4 has been allowed over the prior art because they fail to teach a laser device, comprising: an optical fiber containing a laser activating substance inside for emitting a laser beam from a distal end portion thereof, a part of said optical fiber being fixed in a dense state by an optical medium; and a laser light source for exciting said optical fiber by emitting an exciting light, wherein the optical medium contains an amorphous silica produced by curing a compound with, a repeating unit represented by an empirical formula  $RSiO_{1.5}$  wherein said  $RSiO_{1.5}$  is selected from the group consisting of a poly(2-chloro ethyl) silsesquioxane, a poly(2-bromo ethyl) silsesquioxane, and a mixture thereof.

The following is an examiner's statement of reasons for allowance: claim 9 has been allowed over the prior art because they fail to teach a laser device, comprising: an optical fiber wound to form a plurality of adjacent parts; a bounding layer for bonding and fixing adjacent parts of said optical fiber; and a laser light source for exciting said optical fiber by emitting an exciting light, wherein the optical fiber further comprises: a core containing a laser activating substance for emitting a laser beam from a distal end portion of the optical fiber; and a clad formed around the core, wherein the bonding layer is an organic-inorganic hybrid material that includes a repeating unit represented by an empirical formula  $RSiO_{1.5}$ , wherein  $RSiO_{1.5}$  is selected from the group consisting of a poly(2-chloro ethyl) silsesquioxane, a

**polymethyl-hydride silsesquioxane, a polyphenyl silsesquioxane, a polyphenyl-methyl silsesquioxane, a phenyl silsesquioxane-dimethyl siloxane copolymer, a polyphenyl-vinyl silsesquioxane, polycyclohexyl silsesquioxane, a polycyclopentyl silsesquioxane, a polyhydride silsesquioxane, a poly(2-chloro ethyl) silsesquioxane, a poly(2-bromo ethyl) silsesquioxane, mixtures thereof and a mixture of said at least one said  $\text{RSiO}_{1.5}$  and a polysiloxane.**

Claims 5 – 8, 10 - 13 has been found allowable due to their dependency on claims 3, 4, 9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reason for Allowance".

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Delma R. Flores Ruiz whose telephone number is (571) 272-1940. The examiner can normally be reached on M - F.

Art Unit: 2828

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) -272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Delma R. Flores Ruiz  
Examiner  
Art Unit 2828

DRFR/DW  
May 26, 2004



THO PHAN  
PRIMARY EXAMINER

Don Wong  
Supervisor Patent Examiner  
Art Unit 2828